

| L Number | Hits  | Search Text   | DB                 | Time stamp       |
|----------|-------|---|--------------------|------------------|
| 1        | 23    | "5441918"   | USPAT;<br>US-PGPUB | 2004/06/25 12:55 |
| .        | 578   | 313/512.ccls.   | USPAT;<br>US-PGPUB | 2004/03/11 09:11 |
| .        | 255   | 313/512.ccls. and (LED or (light adj emitting adj diode))   | USPAT;<br>US-PGPUB | 2004/03/08 17:13 |
| .        | 8     | ("4267559"   "4920404"   "4935665"   "5119174"   "5173839"   "5857767"   "6274924"   "6428189").PN.   | USPAT              | 2004/03/08 16:34 |
| .        | 2     | "6452217"   | USPAT;<br>US-PGPUB | 2004/03/08 17:17 |
| .        | 15    | ("4170399"   "4849803"   "5119174"   "5177500"   "5225023"   "5339198"   "5612576"   "5614763"   "5760479"   "5864171"   "5909056"   "6022759"   "6084250"   "6149283"   "6220722").PN. | USPAT              | 2004/03/08 17:17 |
| .        | 3     | "6407411"   | USPAT;<br>US-PGPUB | 2004/03/08 17:18 |
| .        | 1     | "6483196"   | USPAT;<br>US-PGPUB | 2004/03/08 17:20 |
| .        | 2     | ("5475417"   "5479049").PN.   | USPAT              | 2004/03/08 17:19 |
| .        | 3     | "6420178"   | USPAT;<br>US-PGPUB | 2004/03/08 17:21 |
| .        | 5     | ("5143854"   "5575858"   "5685917"   "5695659"   "6171345").PN.   | USPAT              | 2004/03/08 17:21 |
| .        | 2     | "6604971"   | USPAT;<br>US-PGPUB | 2004/03/08 17:33 |
| .        | 8     | ("3706885"   "4081764"   "4825084"   "5847507"   "5922395"   "5959316"   "5998925"   "6066861").PN.   | USPAT              | 2004/03/08 17:22 |
| .        | 25706 | LED and (nanoparticles gold silver)   | USPAT;<br>US-PGPUB | 2004/03/08 17:33 |
| .        | 2434  | LED same (nanoparticles gold silver)  | USPAT;<br>US-PGPUB | 2004/03/08 17:34 |
| .        | 1006  | LED with (nanoparticles gold silver)  | USPAT;<br>US-PGPUB | 2004/03/08 17:34 |
| .        | 159   | (LED adj5 (lamp device display)) same (nanoparticles gold silver)   | USPAT;<br>US-PGPUB | 2004/03/08 17:36 |
| .        | 0     | (LED adj5 (lamp device display)) same ((nanoparticles gold silver) with susp\$6)  | USPAT;<br>US-PGPUB | 2004/03/08 17:37 |
| .        | 594   | ((LED or (light adj emitting adj diode)) adj4 lamp) same (mount\$4)   | USPAT;<br>US-PGPUB | 2004/03/09 09:54 |
| .        | 54    | ((LED or (light adj emitting adj diode)) adj4 lamp) same (mount\$4 with (epoxy resin))  | USPAT;<br>US-PGPUB | 2004/03/09 10:27 |
| .        | 54    | ((LED or (light adj emitting adj diode)) adj4 lamp) same (mount\$4 with (epoxy resin susp\$6))  | USPAT;<br>US-PGPUB | 2004/03/09 12:51 |
| .        | 1     | 5630320.pn.   | USPAT;<br>US-PGPUB | 2004/03/09 12:07 |
| .        | 4     | ("5128843"   "5604480"   "5632551"   "5966393").PN.   | USPAT              | 2004/03/09 12:30 |
| .        | 58    | ((LED or (light adj emitting adj diode)) adj4 lamp) same encapsul\$6  | USPAT;<br>US-PGPUB | 2004/03/09 12:59 |
| .        | 31    | "3676668"   | USPAT;<br>US-PGPUB | 2004/03/09 14:23 |
| .        | 11    | "6015719"   | USPAT;<br>US-PGPUB | 2004/03/09 14:29 |
| .        | 3     | ("5376580"   "5502316"   "5793062").PN.   | USPAT              | 2004/03/09 14:23 |
| .        | 111   | ((LED or (light adj emitting adj diode)) adj lamp) and (Ag silver same epoxy)   | USPAT;<br>US-PGPUB | 2004/03/09 14:30 |
| .        | 13    | ((LED or (light adj emitting adj diode)) adj lamp) same ((Ag silver) with epoxy)  | USPAT;<br>US-PGPUB | 2004/03/09 14:57 |
| .        | 0     | 6410980.URPN.   | USPAT              | 2004/03/09 14:57 |
| .        | 0     | 6410980.URPN.   | USPAT              | 2004/03/09 14:57 |
| .        | 24    | ((LED or (light adj emitting adj diode)) adj lamp) same (thermal\$4 adj6 conduct\$4)  | USPAT;<br>US-PGPUB | 2004/03/09 15:13 |
| .        | 5     | ("4729076"   "4733335"   "4774434"   "5038255"   "5528474").PN.   | USPAT              | 2004/03/09 15:07 |

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| 603  | thermal\$5 adj conduct\$5 adj filler   | USPAT;                | 2004/03/09 15:14 |
| 23   | (thermal\$5 adj conduct\$5 adj filler) and lamp  | US-PGPUB<br>USPAT;    | 2004/03/09 15:16 |
| 58   | 313/500-512.ccls. and (led or (diode adj5 lamp)) same ((encapsul\$6 suspen\$6 epoxy resin) with phosphor)                    | US-PGPUB<br>USPAT;    | 2004/03/09 16:06 |
| 546  | (led or (diode adj5 lamp)) with float\$4   | US-PGPUB<br>USPAT;    | 2004/03/09 16:03 |
| 1    | ( (led or (diode adj5 lamp)) with float\$4) same (thermal\$4 adj conduct\$5)   | US-PGPUB<br>USPAT;    | 2004/03/09 16:04 |
| 546  | (( "LED" or (diode adj5 lamp)) with float\$4)  | US-PGPUB<br>USPAT;    | 2004/03/09 16:05 |
| 5    | ( (diode adj5 lamp) with float\$4)   | US-PGPUB<br>USPAT;    | 2004/03/09 16:05 |
| 40   | (led or (diode adj5 lamp)) same ((encapsul\$6 suspen\$6 epoxy resin) with phosphor)  | US-PGPUB<br>EPO; JPO; | 2004/03/09 16:15 |
| 0    | ((semiconductor LED) adj lamp) and (nano adj3 particles)   | DERWENT<br>USPAT;     | 2004/03/09 16:17 |
| 0    | ((semiconductor LED) adj lamp) same (nano adj3 particles)  | US-PGPUB<br>USPAT;    | 2004/03/09 16:18 |
| 0    | (LED adj lamp) same (nano adj3 particles)  | US-PGPUB<br>USPAT;    | 2004/03/09 16:18 |
| 22   | "5777433"  | US-PGPUB<br>USPAT;    | 2004/03/09 16:45 |
| 7    | ("3739241"   "3760237"   "5019746"   "5093768"   "5289082"   "5460701"   "5514349").PN.                                      | US-PGPUB<br>USPAT     | 2004/03/09 16:19 |
| 13   | 5777433.URPN.  | USPAT                 | 2004/03/09 16:28 |
| 6    | ("5518831"   "5777433"   "5997958"   "6162853"   "6284834"   "6361660").PN.  | USPAT                 | 2004/03/09 16:29 |
| 246  | ((nano adj particles) or (particles adj9 (nanometer nm))) with crystal   | USPAT;                | 2004/03/09 18:21 |
| 0    | ((nano adj particles) or (particles adj9 (nanometer nm))) with crystal and (LED adj lamp)                                    | US-PGPUB<br>USPAT;    | 2004/03/09 18:21 |
| 2    | (silicone adj3 epoxy) same (LED adj lamp)  | US-PGPUB<br>USPAT;    | 2004/03/10 14:46 |
| 0    | (silicone adj3 epoxy) with (LED adj lamp)  | US-PGPUB<br>USPAT;    | 2004/03/10 14:46 |
| 5    | (silicone adj3 epoxy) and (LED adj lamp)   | US-PGPUB<br>USPAT;    | 2004/03/10 14:47 |
| 10   | (silicone near epoxy) and (LED adj lamp)   | US-PGPUB<br>USPAT;    | 2004/03/10 15:25 |
| 286  | (silicone epoxy) and (LED adj lamp)  | US-PGPUB<br>USPAT;    | 2004/03/10 15:25 |
| 50   | (silicone with epoxy) and (LED adj lamp)   | US-PGPUB<br>USPAT;    | 2004/03/10 15:38 |
| 0    | (LED adj lamp) same (carbon adj7 black)  | US-PGPUB<br>USPAT;    | 2004/03/10 15:38 |
| 10   | (LED adj lamp) and (carbon adj7 black)   | US-PGPUB<br>USPAT;    | 2004/03/10 15:39 |
| 0    | (LED adj lamp) and (" Ti 0.sub.2")   | US-PGPUB<br>USPAT;    | 2004/03/10 15:42 |
| 12   | (LED adj lamp) and fillers   | US-PGPUB<br>USPAT;    | 2004/03/10 15:40 |
| 31   | (LED adj lamp) and (" TiO.sub.2")  | US-PGPUB<br>USPAT;    | 2004/03/10 16:12 |
| 65   | (LED adj lamp) and (carbon)  | US-PGPUB<br>USPAT;    | 2004/03/10 16:16 |
| 19   | (LED adj lamp) and (spac\$4 adj3 element)  | US-PGPUB<br>USPAT;    | 2004/03/10 16:16 |
| 27   | ((LED (light adj emitting adj diode) diode (semiconductor) (solid adj state)) adj lamp) same ((heat thermal) adj conduct\$5) | USPAT;                | 2004/03/10 16:47 |
| 2468 | ((semiconductor (solid adj state) LED diode) adj (lamp body component unit) ) and cool\$5                                    | US-PGPUB<br>USPAT;    | 2004/03/11 09:13 |

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| - | 44    | ((semiconductor (solid adj state) LED diode) adj (lamp body component unit) ) and (cool\$5 with ((Ag silver) (Au gold)))   | USPAT;<br>US-PGPUB   | 2004/03/11 09:14 |
| - | 8     | ((semiconductor (solid adj state) LED diode) adj (lamp body component unit) ) same (cool\$5 with ((Ag silver) (Au gold)))  | USPAT;<br>US-PGPUB   | 2004/03/11 09:28 |
| - | 11    | ("3386867"   "3850688"   "3914785"   "3959522"   "4179534"   "4186410"   "4188710"   "4301188"   "4454528"   "4471005"   "4510514").PN.  | USPAT                | 2004/03/11 09:16 |
| - | 18    | 5440574.URPN.  | USPAT                | 2004/03/11 09:26 |
| - | 7     | ((semiconductor (solid adj state) LED diode) adj (lamp body component unit) ) same (crystal with (particles))  | USPAT;<br>US-PGPUB   | 2004/03/11 09:29 |
| - | 0     | ((semiconductor (solid adj state) LED diode) adj (lamp)) same (fum\$4 with carbon)   | USPAT;<br>US-PGPUB   | 2004/03/11 09:31 |
| - | 0     | (LED adj (lamp)) same (fum\$4 with carbon)   | USPAT;<br>US-PGPUB   | 2004/03/11 09:31 |
| - | 0     | (LED adj (lamp)) same (fum\$4 with "Al.sub.2 O.sub.3")   | USPAT;<br>US-PGPUB   | 2004/03/11 09:32 |
| - | 0     | (LED adj (lamp)) same (fum\$4 with alumina)  | USPAT;<br>US-PGPUB   | 2004/03/11 09:32 |
| - | 0     | (LED adj5 (lamp)) same (fum\$4 with alumina)   | USPAT;<br>US-PGPUB   | 2004/03/11 09:33 |
| - | 180   | (LED adj5 (lamp)) same (diffus\$4 scatter\$4)  | USPAT;<br>US-PGPUB   | 2004/03/11 09:39 |
| - | 4     | (LED adj5 (lamp)) same ((diffus\$4 scatter\$4) with crystal\$6)  | USPAT;<br>US-PGPUB   | 2004/03/11 09:39 |
| - | 27086 | silica with cryst\$7   | USPAT;<br>US-PGPUB   | 2004/03/11 09:40 |
| - | 0     | (silica with cryst\$7) and (LED adj lamp)  | USPAT;<br>US-PGPUB   | 2004/03/11 09:40 |
| - | 8     | "01337"  | EPO; JPO;<br>DERWENT | 2004/03/11 10:24 |
| - | 5     | reeh.in. and semiconductor   | USPAT;<br>US-PGPUB   | 2004/03/11 10:25 |
| - | 9     | 5618872.URPN.  | USPAT                | 2004/03/11 10:29 |
| - | 30    | (nano adj5 particles) with crystal   | USPAT;<br>US-PGPUB   | 2004/03/11 11:30 |
| - | 1     | 5225023.pn.  | USPAT;<br>US-PGPUB   | 2004/03/11 11:34 |
| - | 1     | 6452217.pn.  | USPAT;<br>US-PGPUB   | 2004/03/11 11:44 |
| - | 1     | 6452217.URPN.  | USPAT                | 2004/03/11 11:34 |
| - | 15    | ("3834883"   "5225023"   "5847507"   "5865529"   "5998925"   "6084250"   "6132072"   "6165631"   "6281526"   "6294800"   "6340824"   "6351069"   "6361192"   "6452217"   "6501100"   "2002/0084745").PN. | USPAT                | 2004/03/11 11:35 |
| - | 1     | 5777433.pn.  | USPAT;<br>US-PGPUB   | 2004/03/11 11:44 |
| - | 7     | ("3739241"   "3760237"   "5019746"   "5093768"   "5289082"   "5460701"   "5514349").PN.  | USPAT                | 2004/03/11 11:45 |
| - | 13    | 5777433.URPN.  | USPAT                | 2004/03/11 11:51 |
| - | 113   | tsuji.in. and (lead adj frame)   | EPO; JPO;<br>DERWENT | 2004/03/11 14:11 |
| - | 1     | 6410980.pn.  | USPAT;<br>US-PGPUB   | 2004/03/11 13:38 |
| - | 482   | tsuji.in. and semiconductor  | USPAT;<br>US-PGPUB   | 2004/03/11 13:39 |
| - | 76    | tsuji.in. and (semiconductor with resin)   | USPAT;<br>US-PGPUB   | 2004/03/11 14:11 |
| - | 1     | 6015719.pn.  | USPAT;<br>US-PGPUB   | 2004/03/11 13:57 |
| - | 3     | ("5376580"   "5502316"   "5793062").PN.  | USPAT                | 2004/03/11 13:57 |
| - | 9     | tsuji.in. and ((silver Ag) with epoxy)   | USPAT;<br>US-PGPUB   | 2004/03/11 14:01 |
| - | 252   | tsuji.in. and (epoxy)  | EPO; JPO;<br>DERWENT | 2004/03/11 14:11 |

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| 47    | tsuji.in. and (epoxy same semiconductor)  | EPO; JPO;<br>DERWENT | 2004/03/11 14:14 |
| 1     | tsuji.in. and (epoxy near silver)   | EPO; JPO;<br>DERWENT | 2004/03/11 14:15 |
| 34    | "5793062"   | USPAT;<br>US-PGPUB   | 2004/03/11 14:15 |
| 11    | ("4309670"   "5008718"   "5132750"   "5218223"   "5229627"   "5233204"   "5363393"<br>  "5406095"   "5414281"   "5466950"   "5502316").PN.  | USPAT                | 2004/03/11 14:16 |
| 13    | ((semiconductor (solid adj state) LED diode) adj lamp) same ((Ag silver) adj epoxy)   | USPAT;<br>US-PGPUB   | 2004/03/11 15:35 |
| 11591 | quartz with crystal   | USPAT;<br>US-PGPUB   | 2004/03/11 15:55 |
| 0     | (quartz with crystal) near (epoxy or encapsulat\$4)   | USPAT;<br>US-PGPUB   | 2004/03/11 15:55 |
| 1646  | (quartz with crystal) and lamp  | USPAT;<br>US-PGPUB   | 2004/03/11 15:56 |
| 12    | (quartz with crystal) and (LED adj lamp)  | USPAT;<br>US-PGPUB   | 2004/03/11 15:56 |
| 2     | ((led diode (solid adj state) (semi-conductor)) adj3 (lamp light display)) near (suspension)  | USPAT;<br>US-PGPUB   | 2004/06/22 17:32 |
| 99    | ((led diode (solid adj state) (semi-conductor)) adj3 (lamp light display)) same (suspension)  | USPAT;<br>US-PGPUB   | 2004/06/22 17:45 |
| 15    | ("5309070"   "5338944"   "5416342"   "5578839"   "5604763"   "5640792"   "5644584"<br>  "5813752"   "5813753"   "5895932"   "5898185"   "5998925"   "6066861"  <br>"6234648"   "6252254").PN. | USPAT                | 2004/06/22 17:37 |
| 12    | "6274890"   | USPAT;<br>US-PGPUB   | 2004/06/22 18:09 |
| 8     | ("3607710"   "4247864"   "4827118"   "5177593"   "5198479"   "5614131"   "5793062"<br>  "6274890").PN.  | USPAT                | 2004/06/22 18:00 |
| 16    | minnear.in.   | USPAT;<br>US-PGPUB   | 2004/06/22 18:10 |
| 20988 | (led or (light adj emitting adj diode) or (semiconductor) or chip) with (float\$4 surround\$4)  | EPO; JPO;<br>DERWENT | 2004/06/23 12:03 |
| 1763  | (led or (light adj emitting adj diode)) with (float\$4 surround\$4)   | EPO; JPO;<br>DERWENT | 2004/06/23 12:04 |
| 1     | (led or (light adj emitting adj diode)) with ((float\$4 surround\$4) adj suspen\$6)   | EPO; JPO;<br>DERWENT | 2004/06/23 12:04 |
| 282   | (light adj emitting adj diode) with (float\$4 surround\$4)  | EPO; JPO;<br>DERWENT | 2004/06/23 12:56 |
| 630   | 313/512.ccls.   | USPAT;<br>US-PGPUB   | 2004/06/23 12:57 |
| 284   | 313/512.ccls. and (LED or (light adj emitting adj diode))   | USPAT;<br>US-PGPUB   | 2004/06/23 15:11 |
| 3     | ("5847507"   "5900647"   "5998925").PN.   | USPAT                | 2004/06/23 13:18 |
| 0     | 6586874.URPN.   | USPAT                | 2004/06/23 13:18 |
| 0     | 6586874.URPN.   | USPAT                | 2004/06/23 13:19 |
| 14    | ("3922233"   "4661419"   "5198679"   "5571451"   "5717289"   "5813753"   "5847507"<br>  "5851063"   "5925897"   "5966393"   "5998925"   "6066861"   "6069440"  <br>"6084250").PN.             | USPAT                | 2004/06/23 13:44 |
| 5     | ("4211955"   "4727289"   "4783726"   "4939426"   "5160200").PN.   | USPAT                | 2004/06/23 14:08 |
| 11    | ("3849383"   "3938177"   "3999280"   "4000437"   "4058750"   "4267486"   "4486364"<br>  "4843280"   "4859632"   "4890383"   "5059373").PN.  | USPAT                | 2004/06/23 14:18 |
| 10    | 5167556.URPN.   | USPAT                | 2004/06/23 14:22 |
| 7     | (silver adj3 epoxy) with (transparen\$4)  | USPAT;<br>US-PGPUB   | 2004/06/23 15:27 |
| 11    | "5167556"   | USPAT;<br>US-PGPUB   | 2004/06/23 15:27 |
| 5511  | curing with shrink\$4   | USPAT;<br>US-PGPUB   | 2004/06/24 17:11 |
| 69    | (curing with shrink\$4) and (light adj emitting adj diode)  | USPAT;<br>US-PGPUB   | 2004/06/24 17:11 |

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| 9    | "6121637"  | USPAT;    | 2004/06/25 09:56 |
| 1654 | epoxy near (silicon\$2 adj epoxy)  | US-PGPUB  | 2004/06/25 09:56 |
| 1276 | epoxy near (silicone adj epoxy)  | USPAT;    | 2004/06/25 09:57 |
| 24   | (epoxy near (silicone adj epoxy)) same LED   | US-PGPUB  | 2004/06/25 10:01 |
| 3    | (epoxy near (silicone adj epoxy)) same (light adj emitting adj diode)  | USPAT;    | 2004/06/25 10:01 |
| 1197 | (gold silver) with (thermal\$4 adj conduct\$3)   | US-PGPUB  | 2004/06/25 11:05 |
| 83   | ((gold silver) with (thermal\$4 adj conduct\$3)) and LED   | USPAT;    | 2004/06/25 11:06 |
| 10   | ((nano adj particles) or nano-particles or nanoparticles) with (single adj crystal)) and diode   | US-PGPUB  | 2004/06/25 11:24 |
| 38   | ((nano adj particles) or nano-particles or nanoparticles) with (single adj crystal)  | USPAT;    | 2004/06/25 11:18 |
| 570  | diamond same (led or (light adj emitting adj diode))   | US-PGPUB  | 2004/06/25 11:24 |
| 1    | (light adj emitting adj diode) same (diamond with particles)   | USPAT;    | 2004/06/25 11:57 |
| 0    | (light adj emitting adj diode) same (diamond with particles)   | EPO; JPO; | 2004/06/25 11:57 |
| 2    | (light adj emitting adj diode) same (crystal with particles)   | DERWENT   | 2004/06/25 12:00 |
| 66   | (light adj emitting adj diode) same (single adj6 crystal)  | US-PGPUB  | 2004/06/25 12:08 |
| 242  | (light adj emitting adj diode) same (single adj6 crystal)  | US-PGPUB  | 2004/06/25 12:09 |
| 0    | (light adj emitting adj diode) same ((single adj6 crystal) near diamond)   | USPAT     | 2004/06/25 12:09 |
| 1    | (light adj emitting adj diode) same (diamond adj6 particles)   | USPAT     | 2004/06/25 12:10 |
| 29   | ( (light adj emitting adj diode) or diode or led) same (diamond adj6 particles)  | USPAT     | 2004/06/25 12:12 |
| 29   | ( (light adj emitting adj diode) or diode or LED) same (diamond adj6 particles)  | USPAT     | 2004/06/25 12:12 |
| 10   | ( (light adj emitting adj diode) or diode) same (diamond adj6 particles)   | USPAT     | 2004/06/25 12:54 |
| 25   | "4178274"   "4336367"   "4454201"   "4661419"   "4783695"   "4933042"   "5108825"<br>  "5145889"   "5198479"   "5198679"   "5226053"   "5353498"   "5527741"  <br>"5571451"   "5813753"   "5847507"   "5851063"   "5895932"   "5898185"   "5925897"<br>  "5966393"   "5998925"   "6066861"   "6069440"   "6335548"   "2001/0026011"  <br>"2002/0056806").PN. | USPAT     | 2004/06/25 12:15 |